

CLAIMS

COMBINATIONS OF GROWTH REGULATING FACTORS AND HORMONES FOR THE TREATMENT OF NEOPLASIA.

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1- Pharmaceutical combinations for the treatment of neoplasia through simultaneous, separate, or sequential administration, comprising a compound A and B, wherein A and B are selected from the group of molecules consisting in:

A:

- 10 a.1. GnRH, or its analogues, or anti-GnRH antibodies, or GnRH receptor (GnRH-R), or its mutated variants, or derivative peptides, or anti-GnRH-R antibodies, coupled or not to an immunopotentiating carrier protein.
- a.2. Natural or recombinant gonadotropins, or their analogues, or their mutated variants, coupled or not to an immunopotentiating carrier protein,
- 15 hypophyseal anti-gonadotropin antibody, their Fags, scFV fragments, humanized or not.
- a.3. Hypophyseal Gonadotropin receptors, or their mutated variants, or derivative peptides, coupled or not to an immunopotentiating carrier protein.
- a.4. Hypophyseal Gonadotropin anti-receptor antibodies, their Fabs, scFV
- 20 fragments, humanized or not.

B:

- b.1. Natural or recombinant EGF or its mutated variants, or derivative peptides, or EGF mimetic peptides, or EGF analogues, coupled or not to an immunopotentiating carrier protein.
- 25 b.2. Anti-EGF antibodies, their FabsscFV fragments, humanized or not.
- b.3. EGF receptor (EGF-R), or its mutated variants, or derivative peptides coupled or not to an immunopotentiating carrier protein.
- b.4. Anti-EGF receptor antibodies, their Fabs, scFV fragments, humanized or not.
- b.5. Natural or recombinant VEGF or mutated variants, or derivative peptides, or
- 30 VEGF mimetic peptides, or VEGF analogues, coupled or not to an immunopotentiating carrier protein.
- b.6. Anti-VEGF antibodies, their Fabs, scFV fragments, humanized or not.
- b.7. VEGF receptors, or mutated variants, or derivative peptides from VEGF receptors, coupled or not to an immunopotentiating carrier protein.

- b.8. Anti-VEGF receptor antibodies, their Fabs, scFV fragments, humanized or not.
 - b.9. Natural or recombinant TGF α mutated variants, or derivative peptides, or TGF mimetic peptides, or TGF analogues, coupled or not to an immunopotentiating carrier protein.
 - b.10. Anti-TGF antibodies, their Fabs, scFV fragments, humanized or not.
 - b.11 TGF receptor (TGF-R), or mutated variants, or derivative peptides coupled or not to an immunopotentiating carrier protein.
- 2- Combinations according to claim 1, wherein the A and B group of molecules are coupled to the immunopotentiating carrier protein by conjugation or the formation of chimeric proteins.
 - 3- Combinations according to claims 1 and 2, wherein the GnRH analogue peptide has sequence pGlu-His-Trp-Ser-Tyr-Pro-Leu-Arg-Pro-Gly, coupled to an immunopotentiating carrier protein.
 - 4- Combinations according to claims 1 and 2, wherein the immunopotentiating carrier protein is selected from *Neisseria meningitides* P1 and P64 outer membrane proteins.
 - 5- Combinations according to claims 1 and 2, wherein the immunopotentiating carrier protein is a Tetanic Toxoid (TT) T helper epitope.
 - 6- Combinations according to claims 1 and 2, wherein the conjugated chimeric protein is one of the following variants:
 - a) GnRH bound to a carrier protein and to EGF.
 - b) GnRH bound to a carrier protein and to VEGF.
 - c) GnRH bound to a carrier protein and to TGF.
 - d) GnRH bound to a carrier protein, to EGF and TGF.
 - e) GnRH bound to a carrier protein, to VEGF and EGF.
 - 7- A method for the generation of combined immune response comprising treatment with one of the therapeutic combinations defined in any claims from 1 to 6.
 - 8- A method according to claim 7, wherein the combinations can be applied simultaneously, separately, or sequentially.